

**CLAIMS**

1. Marking determining method, for determining a packet marking of packets of an incoming packet-flow, in order to keep said packets in  
5 conformance with a traffic policy, said determining being based on an actual value of a traffic reservation parameter, said traffic reservation parameter being a measure of available network resources dedicated to packets of said incoming packet-flow having a pre-assigned priority, said determining further  
10 being based on said pre-assigned priority of said packets of said incoming packet flow, said traffic reservation parameter having a predetermined minimum and a maximum value, **CHARACTERISED IN THAT** said marking method comprises the following steps:

- a. holding a threshold value for said traffic reservation parameter, said threshold value lying between said minimum and said maximum value of  
15 said traffic reservation parameter;
- b. metering said actual value of said traffic reservation parameter;  
and
- c. determining said packet marking of said packets only based on said actual value of said traffic reservation parameter if said actual value of  
20 said traffic reservation parameter exceeds said threshold value for said traffic reservation parameter.

2. Marking method according to claim 1, **CHARACTERISED IN THAT** said determination packet marking additionally is based on at least one  
25 additional pre-assigned priority for each said packet of said incoming packet-flow, each said additional pre-assigned priority having a separate threshold value assigned to said traffic reservation parameter.

30 3. Marking determining method according to claims 1 and 2, **CHARACTERISED IN THAT** said traffic reservation parameter is the filling level of a token bucket.

4. Marking determining method according to claims 1 and 2,  
**CHARACTERISED IN THAT** said traffic reservation parameter is a sending  
rate estimate.

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5. Marking determining method according to claims 1 or 2,  
**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional  
pre-assigned priority is a packet loss priority.

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6. Marking determining method according to claims 1 or 2,  
**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional  
pre-assigned priority is a packet traffic category.

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7. Marking determining method according to claims 1 or 2,  
**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional  
pre-assigned priority is a type of sender.

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8. Marking determining device, for determining a packet marking of  
packets of an incoming packet-flow, in order to keep said packets in  
conformance with a traffic policy, said determining being based on an actual  
value of a traffic reservation parameter, said traffic reservation parameter being  
a measure of available network resources dedicated to packets of said  
incoming packet-flow having a pre-assigned priority, said determining further  
being based on said pre-assigned priority of said packets of said incoming  
packet flow, said traffic reservation parameter having a predetermined minimum  
and a maximum value

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**CHARACTERISED IN THAT** said marking device comprises the following  
parts:

a. threshold holding part (THHP), adapted to hold a threshold value  
for said traffic reservation parameter, said threshold value lying between said  
minimum and said maximum value of said traffic reservation parameter;

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b. metering part (MEP), adapted to check on said actual value of said traffic reservation parameter; and

c. determination part (DETP), adapted to determine said packet marking of said packets only based on said actual value of said traffic

5 reservation parameter if said actual value of said traffic parameter exceeds said threshold value for said traffic reservation parameter.

9. Marking determining device according to claim 8,

**CHARACTERISED IN THAT** said determination packet marking additionally is  
10 based on at least one additional pre-assigned priority for each said packet of said incoming packet-flow, each said additional pre-assigned priority having a separate threshold value assigned to each of said traffic reservation parameter.

10. Marking determining device according to claims 8 and 9,

15 **CHARACTERISED IN THAT** said traffic reservation parameter is a filling level of a token bucket.

11. Marking determining device according to claims 8 and 9,

**CHARACTERISED IN THAT** said traffic reservation parameter is a sending  
20 rate estimate.

12. Marking determining device according to claims 8 or 9,

**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional pre-assigned priority is a packet loss priority.

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13. Marking determining device according to claims 8 or 9,

**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional pre-assigned priority is a packet traffic category.

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14. Marking determining device according to claims 8 or 9,

**CHARACTERISED IN THAT** said pre-assigned priority and/or said additional pre-assigned priority is a type of sender.

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15. Communication network element including a marking determination device as claimed in any of the claims 8 up to claim 14.

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